

Claims 2-11 and 18-25 depend, directly or indirectly, from independent Claim 1. When the recitations of Claims 2-11 and 18-25 are considered in combination with the recitations of Claim 1, Applicant submits that dependent Claims 2-11 and 18-25 likewise are patentable. The rejection of these claims is likewise overcome and should be withdrawn.

For the reasons set forth above, Applicant respectfully requests that the Section 112 rejections of Claims 1-12 and 18-25 be withdrawn.

The rejection of Claims 1-5, 7-12 and 23-25 under 35 U.S.C. § 103 as being unpatentable over Boggolini et al. (US Patent No. 5, 087, 619) and Yu et al. (PMID 7756673) is respectfully traversed.

Claim 1 recites a “method of treating SCC 2/88, a canine squamous carcinoma cell line, for cancer, comprising the step of feeding a dog a therapeutic agent comprising a vitamin D analog.”

Boggolini et al. teaches a method of treating leukemia and basal cell carcinoma in a warm-blooded animal comprising administering an effective amount of a Vitamin D analog. Boggolini et al. fails to teach or suggest a method as recited in Claim 1. Yu et al. describes examinations conducted with respect to a human cell line and reports that they have examined the in vitro effects of 1,25 dihydroxy-vitamin D₃ 1,25 (OH)₂D₃ and two side chains analogs of 1,25(OH)₂D₃ (EB1089 and MC903) on cell growth and parathyroid hormone related peptide (PTHrP) production in immortalized (HPK1A) and neoplastic (HPK1A-ras) keratinocytes.

Applicant respectfully submits that Boggolini et al. and Yu et al. do not teach nor suggest the method recited in Claim 1. Specifically, neither Boggolini et al. nor Yu et al. teach or suggest a method of treating SCC 2/88, a canine squamous carcinoma cell line, for cancer, comprising the step of feeding a dog a therapeutic agent comprising a vitamin D analog. For the reasons set forth above, Applicant submits that Claim 1 is patentable over Boggolini et al. and Yu et al.

Claims 2-5, 7-12, and 23-25 depend, directly or indirectly, from independent Claim 1. When the recitations of Claims 2-5, 7-12 and 23-25 are considered in combination with the recitations of Claim 1, Applicant submits that dependent Claims 2-5, 7-12 and 23-25 likewise are patentable.

The Examiner's combination of Boggolini et al. with Yu et al. is traversed since there is no teaching nor suggestion in either Boggolini et al. nor Yu et al. for the combination. Further, Yu et al. pertains to a human cell line and specifically reports that they have examined the in vitro effects of 1,25 dihydroxy-vitamin D3 [1,25 (OH)₂D₃] and two side chains analogs of 1,25 (OH)₂D₃ (EB1089 and MC903)) on cell growth and PTHRD production in immortalized (HPK1A) and neoplastic (HPK1A-ras) human keratinocytes.

Applicant respectfully submits that the Examiner's Section 103 rejection of presently pending claims 1-5, 7-12 and 23-25 is not a proper rejection. Obviousness cannot be established by merely suggesting that it would have been obvious to one of ordinary skill in the art to modify Boggolini et al. according to the teachings of Yu et al.

More specifically, as is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. The required teaching, suggestion and incentive supporting the Examiner's combination is absent here. Neither Boggolini et al. nor Yu et al. teach or suggest the claimed combination. Furthermore, in contrast to the assertion within the Office Action, Applicant respectfully submits that it would not be obvious to one skilled in the art to combine Boggolini et al. with Yu et al. because there is no motivation to combine these references suggested in the art. The Examiner has not pointed to any prior art that teaches or suggests combining the disclosures.

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levengood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicants' disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion nor motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown. Specifically, the Examiner has not pointed to any prior art that teaches or suggests a reasonable expectation of success or motivation in combining the references.

Furthermore, it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the cited art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the art to deprecate the claimed invention. Further, it is

impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. The present Section 103 rejection is apparently based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention.

Since there is no teaching, suggestion, or motivation in the cited references for the claimed combination recited in Claims 1-5, 7-12 and 23-25, the Section 103 rejection of Claims 1-5, 7-12 and 23-25 appears to be based on an impermissible hindsight reconstruction in which isolated disclosures have been picked and chosen in an attempt to deprecate the present invention. Of course, such a combination is impermissible.

For at least the reasons set forth above, Applicant respectfully requests that the Section 103 rejections of Claims 1-5, 7-12 and 23-25 is overcome and should be withdrawn.

The rejection of Claims 6 and 18-22 as being unpatentable under 35 U.S.C. § 103 over Boggolini et al. and Yu et al. in view of Katzung and Hardman et al. is respectfully traversed.

Claims 6 and 18-22 depend from Claim 1. Boggolini et al. and Yu et al are described above. Katzung teaches that hypercalcemia causes central nervous system depression, including coma and is potentially lethal. Its major causes (other than thiazide therapy) are hyperparathyroidism and cancer with or without bone metastases. Further Katzung teaches that less common causes are hypervitaminosis D, sarcoidosis, thyrotoxicosis, mil-alkali syndrome, adrenal insufficiency and immobilizations. Katzung appears to be a non-analogous reference since Katzung does not relate to a method of treating SCC 2/88, a canine squamous carcinoma cell line, for cancer, comprising the step of feeding a dog a therapeutic agent comprising a vitamin D analog, as recited in Claim 1. Hardman et al. is a page from a text book indicating that pain is associated with cancer. Therefore, Claim 1 is submitted to be patentable over Boggolini et al. and Yu et al. in view of Katzung and Hardman et al.

When the recitations of Claims 6 and 18-22 are considered in combination with the recitations of Claim 1, Applicant submits that dependent Claims 6 and 18-22 likewise are patentable.

Applicants respectfully submit that the Examiner's Section 103 rejection of the presently pending Claims 6 and 18-22 is not a proper rejection. Obviousness cannot be

established by merely suggesting that it would have been obvious to one of ordinary skill in the art to modify Boggolini et al. and Yu et al. according to the teachings of Katzung. More specifically, as is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. The required teaching, suggestion and incentive supporting a combination is absent here. Neither Boggolini et al. nor Yu et al. teach or suggest the claimed combination. Furthermore, in contrast to the assertion within the Office Action, Applicant respectfully submits that it would not be obvious to one skilled in the art to combine Boggolini et al., Yu et al., Katzung, and Hardman et al. because there is no motivation to combine the references suggested in the art. Rather, the Examiner has not pointed to any prior art that teaches or suggests combining these pieces of prior art.

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levengood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicant's disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicant's disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion or motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown. Specifically, the Examiner has not pointed to any prior art that teaches or suggests a reasonable expectation of success or motivation in combining the references.

Furthermore, it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the cited art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the art to deprecate the claimed invention. Further, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. The present Section 103 rejection is apparently based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention.

Since there is no teaching, suggestion, or motivation in the cited references for the combination recited in Claims 6 and 18-22, the rejection of Claims 6 and 18-22 appears to be based on impermissible hindsight reconstruction in which isolated disclosures have been

picked and chosen in an attempt to deprecate the present invention. Of course, such a combination is impermissible, and for this reason, Applicant requests that the 35 USC § 103 rejection of Claims 6 and 18-22 be withdrawn.

With respect to newly added Claim 26, Applicant respectfully submits that none of the cited art describes a method of providing a therapeutic agent to a pet, wherein the agent comprises a vitamin D analog and the method comprises providing a pet food including the agent, and feeding the pet food to a pet. Therefore, Applicant submits that Claim 26 is patentable over the cited art.

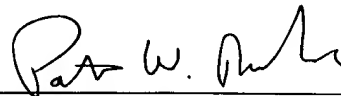
Newly added Claims 27-33 depend from independent Claim 26. When the recitations of these claims are considered in combination with the recitations of Claim 26, Applicant submits that Claims 27-33 likewise are patentable over the cited art.

With respect to newly added Claim 34, Applicant respectfully submits that none of the cited art describes a method of administering a pharmaceutical agent to a pet, wherein the agent comprises a vitamin D analog and the method comprises providing a pet food including the agent, and feeding the pet food to a pet. Therefore, Applicant submits that Claim 34 is patentable over the cited art.

Newly added Claims 35-40 depend from independent Claim 34. When the recitations of these claims are considered in combination with the recitations of Claim 34, Applicant submits that Claims 35-40 likewise are patentable over the cited art.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully submitted,



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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Nongnuch Inpanbutr

Serial No.: 09/804,111

Filed: March 12, 2001

For: EFFECTS OF 1,2,5 (OH)₂D₃
AND ITS ANALOGS ON
PARATHYROID HORMONE-
RELATED SECRETION AND
CELL GROWTH IN CANINE
SQUAMOUS CELL
CARCINOMA

Art Unit: 1617

Examiner: Mojdeh Bahar

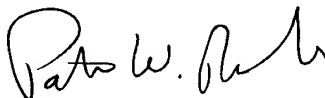
SUBMISSION OF MARKED UP CLAIMS UNDER 37 C.F.R. 1.121(c)(1)(ii).

Hon. Commissioner for Patents
Washington, D.C. 20231

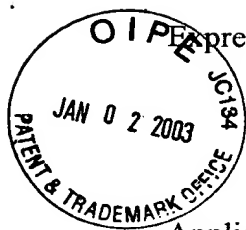
Sir:

Submitted herewith are marked up Claims in accordance with 37 C.F.R.
1.121(c)(1)(ii) wherein additions are underlined and deletions are [bracketed].

1. (once amended) A method of treating [cancer in a dog] SCC 2/88, a canine
squamous carcinoma cell line, for cancer, comprising the step of feeding a dog a therapeutic
agent comprising a vitamin D analog.



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